

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Joseph J. Bergmeister et al.

Prior Application: Serial No. 09/203,094  
Examiner: L. Choi  
Group Art Unit: 1713

For: PROCESS THAT PRODUCES POLYMERS

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Please amend the 37 C.F.R. 1.53(b) divisional application as follows:

**IN THE SPECIFICATION**

On page 1, and each page thereafter, please change the attorney docket no.  
from "33606US" to --- 33606US1 ---.

On page 1, after the title, please insert the following:

--- This application is a division of application Serial No. 09/203,094, filed  
December 1, 1998, now allowed. ---.

**IN THE CLAIMS**

Please cancel claims 1-11 and replace them with the following new claims:

12. A polymer of ethylene and optionally a comonomer selected from alpha olefins having from 1 to 12 carbon atoms, said polymer having the following properties:
  - a density in the range of from about 0.94 to about 0.96,
  - a HLMI in the range of about 5 to about 45/g/10 min,
  - a shear ratio in the range of from about 150 to about 400,
  - a Mw/Mn in the range of from about 15 to about 55,
  - an ESCR condition A greater than about 1000 hours,
  - an ESCR condition B greater than about 200 hours,
  - a normalized die swell in the range of from about 0.8 to about 1.1,
  - a weight swell in the range of from about 300 to about 500 percent, and
  - an onset of melt fracture greater than about  $2000\ sec^{-1}$ .
13. A polymer according to claim 12 prepared from ethylene and 1-hexene.
14. A polymer according to claim 13 having a density in the range of about 0.953 to about 0.958.
15. A polymer according to claim 13 having a Mw/Mn greater than 30.
16. A polymer according to claim 15 having a density in the range of from about 0.953 to about 0.958.

17. A polymer of ethylene and optionally a comonomer selected from alpha olefins having from 4 to 12 carbon atoms, having a shear ratio of greater than 200 and a Mw/Mn greater than 30.

18. A polymer according to claim 17 having a density in the range of from about 0.94 to about 0.96.

19. A polymer according to claim 18 having an ESCR condition A greater than 1000 hours and an ESCR condition B greater than 2000 hours.

20. A polymer according to claim 19 having an onset of melt fracture greater than about 2000 sec<sup>-1</sup>.

### REMARKS

In accordance with the above amendments, all the elected claims in the prior application which have now been allowed, have been cancelled and the non-elected polymer claims have been cancelled and replaced with the new claims provided herewith. Support for the claims can be found on page 3, lines 15 through page 4, line 2. Further support is provided by the data in the inventive runs of the Examples set forth in the application.

The Examiner's attention is drawn to the various publications of record in the parent application and to commonly owned copending application S.N. 09/213,884, now allowed and a divisional of application S.N. 09/213,884, to be filed on or about the same date as the present application.

The claims presented here are considered to be patentable over all of the publications of record.

Prompt review and allowance of this application are respectfully requested.

Respectfully submitted,

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JAN 31 2001

(Date)

Edward L. Bowman

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